

and *os petrosum* brought from New Zealand. This bladebone, although it agrees in general form with that of the European species, differs from it in the outline being more oblique, having the front edge of the scapula more erect, and the back edge lower and more directed backwards than in the bladebone of *Megaptera longimana* of the North Sea and North Atlantic Ocean.

#### BIBLIOGRAPHICAL NOTICES.

*Mammalia, Recent and Extinct. An Elementary Treatise for the use of the Public Schools of New South Wales.* By A. W. SCOTT, M.A. Sydney: Thomas Richards, Government Printer, 1873. 8vo, pp. 141 and xix. Price 2s. 6d.

THE Preface informs us that "The following pages, briefly descriptive of the economy of Seals, Dugongs, and Whales, and of their principal fossil allies, form the second part or Section B of an 'Elementary Treatise on the Mammalia,' designed for the use of the more advanced pupils in the Public Schools of this country under the direction of the Council of Education.

"Whatever information we possess upon the natural history of the finned mammals, particularly in a popular yet scientific form, has been so scantily and unequally distributed, that in this direction a comparatively new field may be said to be open to the teacher as well as to the youthful inquirer.

"Influenced also by the great commercial value of the Pinnata, I have felt anxiously desirous to direct without further delay the attention, and thus possibly secure the sympathy, of readers other than students to the necessity of prompt legislative interference in order to protect the oil- and fur-producing animals of our hemisphere, or at least some of them, against the wanton and unseasonable acts committed by the unrestrained trades—and thus not only to prevent the inevitable extermination of this valuable group, but to utilize their eminently beneficial qualities into a methodical and profitable industry.

"Keeping steadily in view these two objects, whose importance I trust will bear me out in deviating from my original intention in the order of the issue of publication, I have endeavoured:—first, to interest the youthful mind with selections of well authenticated anecdotes of the general habits of these peculiar animals, accompanied, however, by those drier details of structural characters essentially requisite to assist the more advanced and thoughtful student to a better understanding of the generic distinctions, and to aid him as a work of reference or descriptive catalogue, should he be disposed in after-life to prosecute his researches in this difficult and

imperfectly understood branch of zoology; and, secondly, by devoting as much space as my limits would permit to the consideration of the animals whose products are of such commercial value to man, and whose extinction would so seriously affect his interests, and to point out the pressing necessity that exists for devising protection for the fur-seals and the sperm and right whales of the Southern Ocean."

This work is far more than its title and cheap price would lead one to expect. It is a scientific and popular account of all known seals, whales, and dolphins, far more complete than any English or Continental work that I am acquainted with.

The catalogues of the British Museum are the basis of the work, as far as regards the recent species; the observations on the history and habits of the animals are very well compiled; and we look forward to the continuation of the work with great pleasure. I will make two suggestions to the author.

I think it is to be regretted that the author of this work, intended for the use of schools, should have occupied so much space with giving the synonyms of the species, a subject very interesting to scientific zoologists, but of no importance to even advanced pupils. Secondly, it would be much better if the author, who evidently has little practical means of judging for himself, placed more confidence in the descriptions from real specimens.

In his account of the southern fur-seals, for example, which is a subject particularly interesting to the Australians, he has been misled by Mr. Allen's observations, when describing some seals of the Northern Pacific, into believing that all the southern fur-seals belong to one species, while Mr. Allen admits that at the time he wrote he had not examined a single fur-seal from the southern hemisphere, but *thought* they were all one species; whereas I have come to a different conclusion, having under my care two stuffed skins, five unstuffed skins, and two skulls of *Arctocephalus antarcticus* from the Cape of Good Hope, four stuffed skins and four skulls of *Arctocephalus nigrescens* from the Falkland Islands, a skull of *Arctocephalus cinereus* from New Zealand, a stuffed specimen and a flat skin of *Arctocephalus falklandicus* from the Falkland Islands (which Mr. Scott has done me the honour to call *A. Grayi*), and two stuffed skins and two skulls of *Gypsophoca tropicalis* from North Australia; and I believe that if Mr. Allen had had the opportunity of examining these specimens he would have changed his opinion. While the author puts all these seals under two names, he describes as new a "top-knot seal" from Patagonia under the name of *Arctocephalus eulophus*, from the notes of a sealer!

It is to be observed that not only do the species above mentioned differ in the form of their skulls, and in general size, proportion of parts, and colour, but also the skins from the Falkland Islands, Australia, and the Cape bear different prices in the market, and are at once known by the furmonger.—J. E. GRAY.